

Brick Software LLC

Inventory Software Built for the Way You Work

Custom inventory systems • Workflow automation • Hardware integration

Inventory Shouldn't Slow Down Your Operations



Workflows built around software limitations

Generic systems force teams to adapt their process around the tool



Employees waste time locating stock

When physical locations aren't mapped clearly, finding inventory becomes a manual search.



Stock data you can't fully trust

Delayed updates and human errors quickly create inventory mismatches.



Too much manual entry

Receiving stock becomes slow, repetitive, and easy to postpone.



A Faster Way to Receive and Locate Tire Stock

Our client had previously implemented a standard stock management application for their tire shop. After roughly five weeks, the team stopped using it and returned to their old process: placing tires directly on the shelves and manually checking availability when a customer made an inquiry.

The main issue was speed. The business receives approximately 1,000–1,500 tires per week, and registering each tire individually created too much additional work.

As a result, the client had no reliable way to verify stock remotely. Each availability request required a worker to physically check the storage area, consuming staff time and often forcing customers to wait for a callback. According to the client, this delay resulted in an estimated 2–7% of potential customers being lost.

CLIENT: A&C Pneus

LOCATION: Ans, Belgium

PROJECT: Custom Tire Inventory System

VOLUME: ~1,000–1,500 tires/week

IMPLEMENTED: February 2026



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From Tire Sidewall to Inventory in Seconds

Point



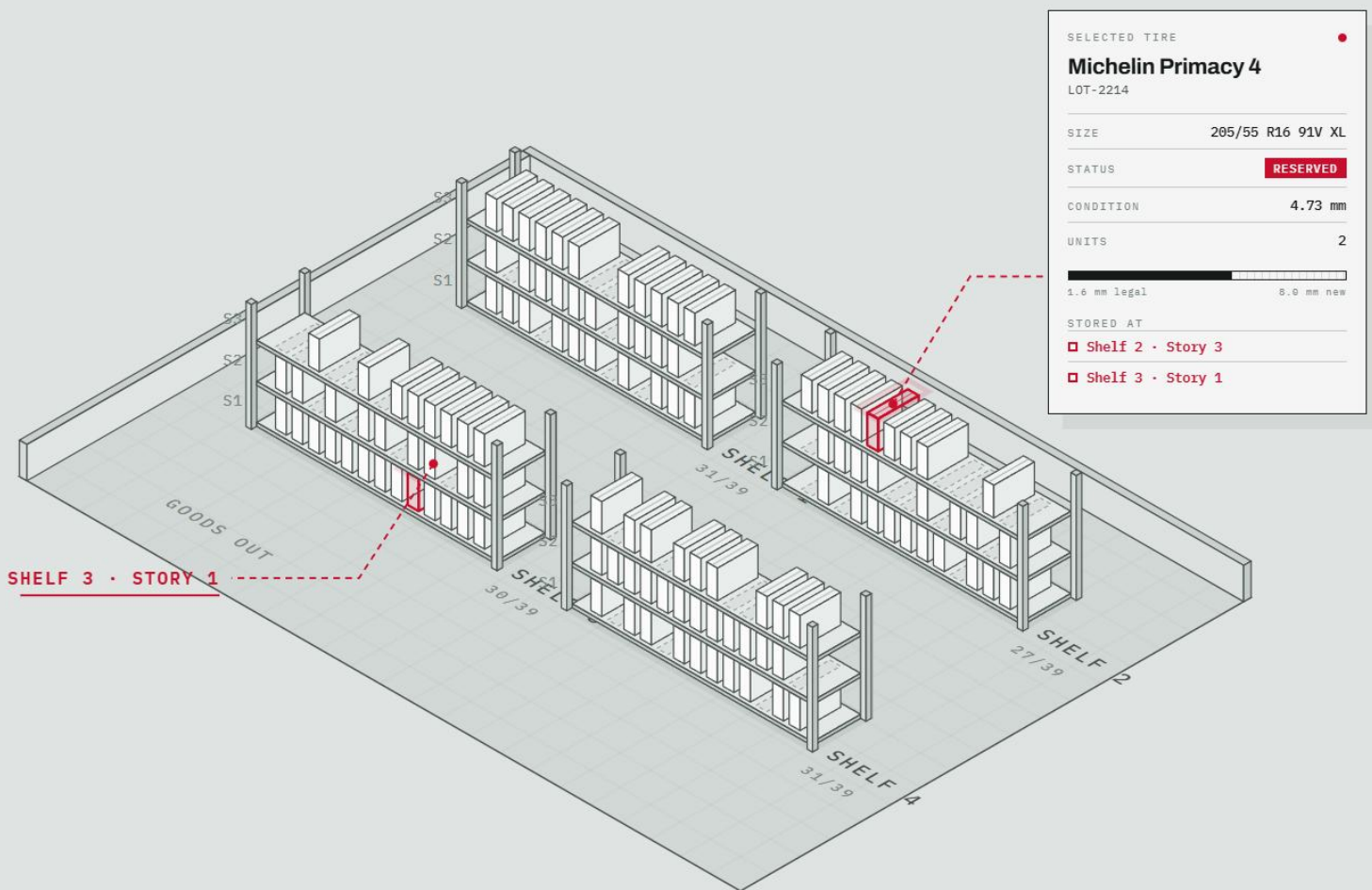
Recognize

Inventory Updated



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Know Exactly Where Every Item Is Stored



Inventory is linked directly to its physical location, giving employees an immediate view of where stock is stored and where capacity remains.

What Used to Take a Minute Now Takes Seconds

Brick Software reduced tire registration from approximately 60 seconds per pair to just 1–2 seconds.

BEFORE

~60 sec per tire pair

AFTER

~1–2 sec per tire pair

Up to 98% faster registration

Faster receiving

Large deliveries can be registered without creating a bottleneck.

Less manual work

Employees no longer need to type each tire reference individually.

Inventory stays usable

Because registration takes seconds, staff actually keep the system updated.



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One Inventory Across Every Store and Sales Channel.

Our client operates three electronics retail locations in Brussels while selling through physical stores, Amazon, and its own website.

Before the system, stock was managed separately across locations and sales channels. This made it difficult to keep product availability accurate everywhere.

A sale in one store could leave Amazon or the website showing stock that was no longer available. At the same time, one branch could run out of a product while stock remained available elsewhere.

The business needed one connected system for point of sale, inventory, staff management, stock transfers, and online marketplace synchronization.

CLIENT: Multi-location electronics retailer

LOCATION: Brussels, Belgium

LOCATIONS: 3 retail stores

SCOPE: POS · Inventory · Amazon Sync · Admin Management

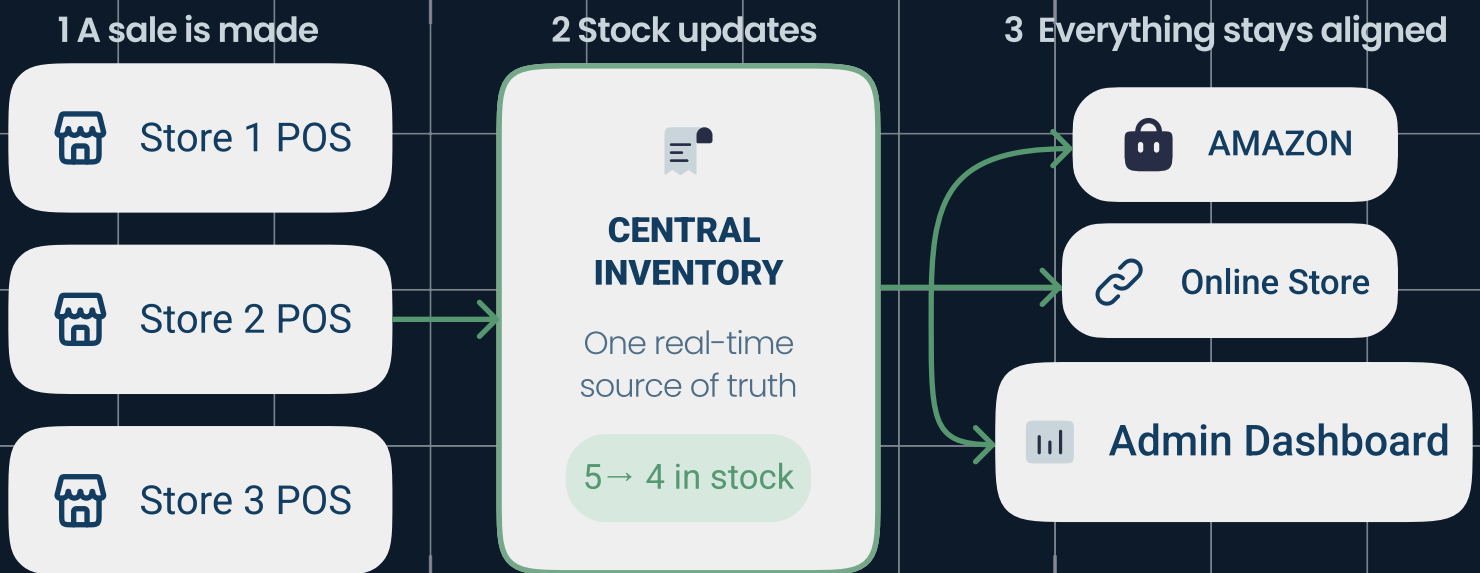
Client identity withheld by request.



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From Every Sale to One Shared Inventory

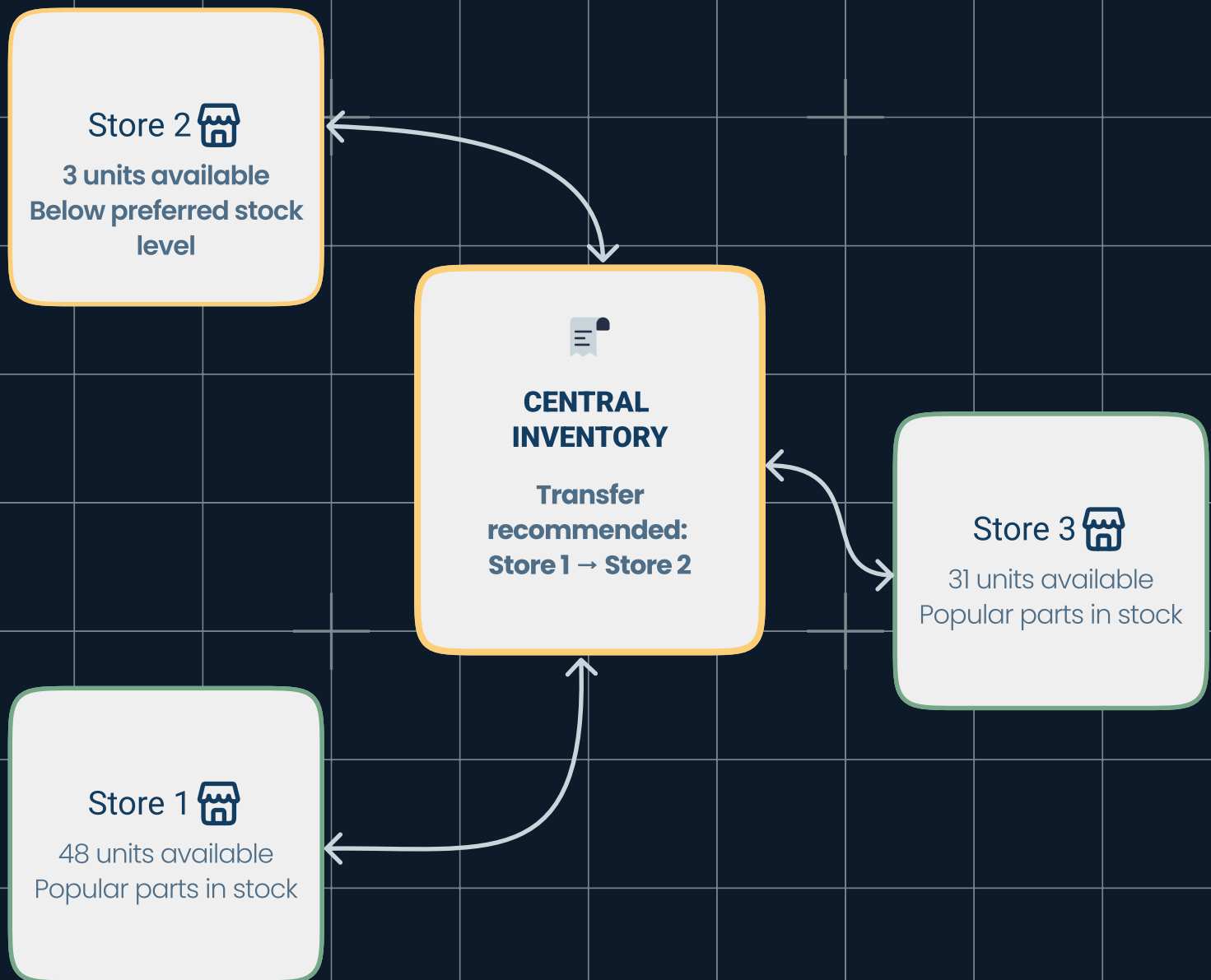
A single stock record connects every sales channel.



Every sale and stock movement feeds **one shared inventory record**, keeping all three stores, Amazon, and the online store aligned.

See Exactly Where Every Product Is Available

Inventory is linked to every store location, giving staff a real-time view of availability and enabling stock to be moved before a location runs out.



One Source of Truth For Every Sale

Three stores, Amazon, and the online shop now work from one shared inventory source.

BEFORE

Separate stock per location

Manual Amazon updates

Risk of overselling

Local-only management

AFTER

Shared multi-location inventory

Stock synchronized with Amazon

Availability linked to actual stock

Remote admin oversight

**3 stores. Multiple sales channels.
One connected retail system.**

Staff can see stock, move inventory between locations, and manage operations from one central platform.



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Secure licensing infrastructure built for production scale

Independent game studios selling outside centralized platforms such as Steam still need to control who can access their products, which versions customers are authorized to use, and how protected assets behave after distribution.

For these businesses, licensing is not simply an administrative feature. It becomes part of the product's critical infrastructure.

If authentication is too slow, legitimate customers experience delays. If the licensing service becomes unavailable, customers may lose access to software they have already purchased. If requests can be modified or replayed, unauthorized installations may bypass licensing controls.

CLIENT: Keydros & Kivo Studios

INDUSTRY: Digital products and video-game distribution

SERVICES: Distributed infrastructure, licensing APIs, edge computing, security and workflow automation

INFRASTRUCTURE: Cloudflare Workers



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Protecting digital products without compromising availability

Keydros needed an infrastructure capable of:

- Authenticating customers and installations
- Controlling access to specific product versions
- Detecting expired or replayed requests
- Supporting controlled offline operation
- Remaining responsive during traffic spikes

The central engineering question:

How do you enforce licensing controls without allowing the licensing system itself to become a single point of failure?

Project requirements:



Security

- Signed requests and identity validation
- Runtime verification
- Time-bound authentication



Availability

- Controlled offline operation
- Automatic recovery paths
- Graceful degradation



Performance

- Edge-based execution
- Efficient validation
- Globally distributed processing



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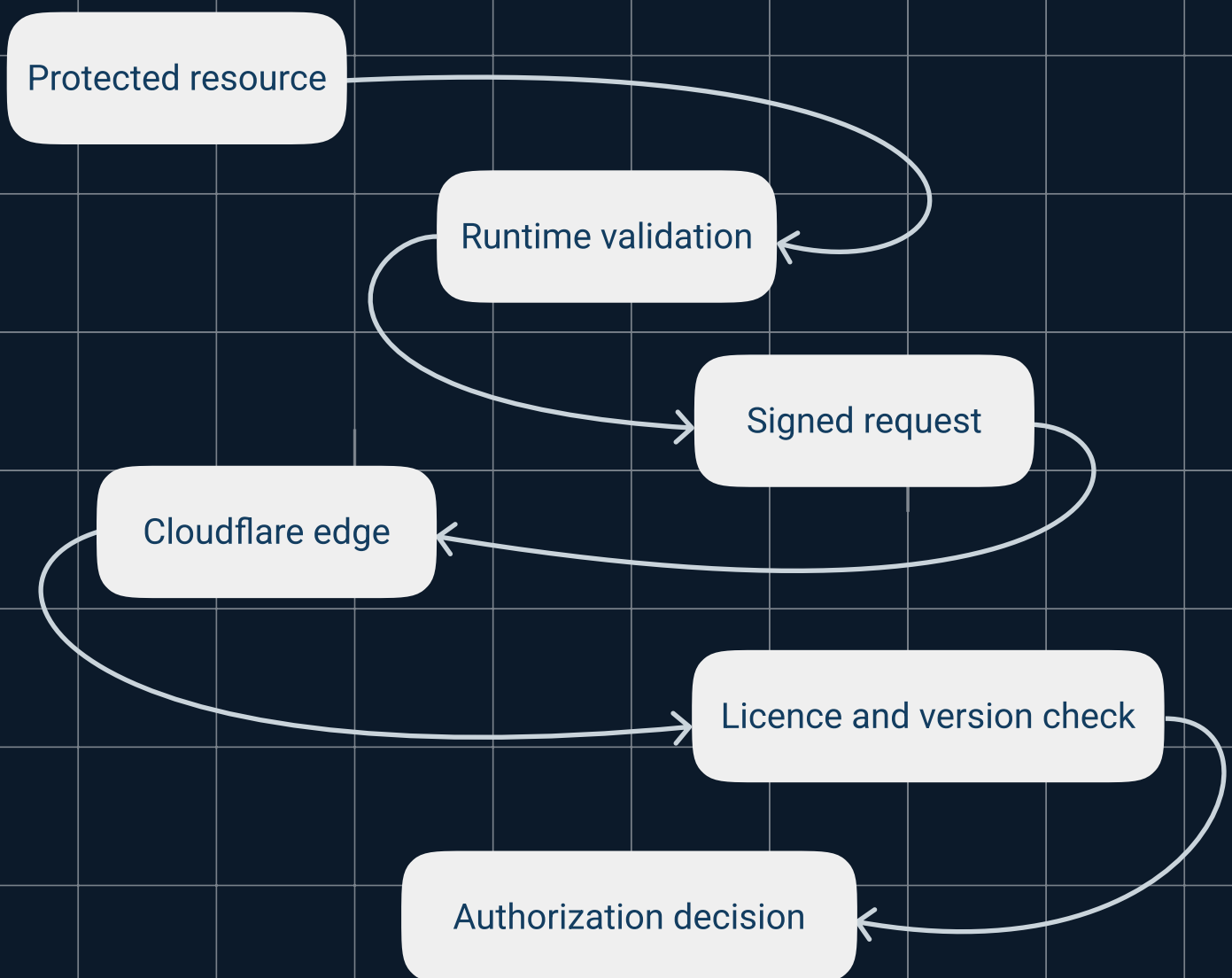
Multiple trust layers protecting one runtime

Keydros separates authentication into two stages.

The first verifies that the protected product is operating inside its expected script environment.

The second contacts the distributed edge infrastructure to validate the customer's licence, permitted version and request freshness.

Requests are authenticated using HMAC-SHA256 signatures, while time-bound request data reduces exposure to replay attempts.



Security designed around multiple trust layers

No individual check is treated as sufficient on its own.

Each request must pass through several validation stages before the infrastructure authorizes the protected product to run.

This layered approach allows Keydros to verify the environment, request integrity, licence identity and permitted product version independently.



Runtime integrity

Verifies that the protected product is operating inside its expected script environment before contacting the licensing infrastructure.

Protects against: unauthorized execution contexts and modified runtime conditions.



Signed communication

HMAC-SHA256 signatures allow Keydros to verify the authenticity and integrity of incoming authentication requests.

Protects against: request modification and unauthenticated API calls.



Request freshness

Time-bound request data limits how long an authentication request remains valid after it is created.

Protects against: indefinite reuse of previously captured requests.



Licence authorization

The edge infrastructure checks the customer identity, requested product and permitted version before returning an authorization decision.

Protects against: licence sharing and unauthorized version access.



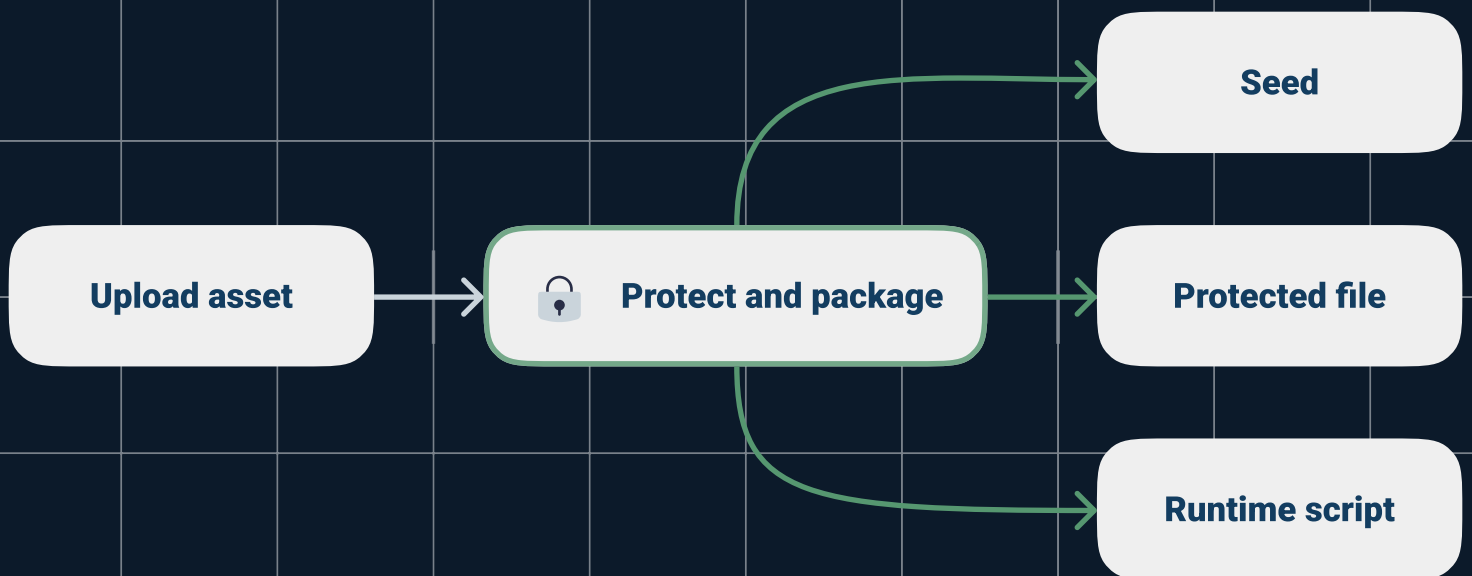
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Turning asset protection into a repeatable workflow

Blitz was developed for **Kivo Studios** to protect distributable FiveM map assets without creating a complicated publishing process.

The publisher uploads a .ytyp file. Blitz then generates a unique seed, a protected asset and its accompanying runtime script.

The distributed asset remains unusable until the customer and product version are successfully validated.

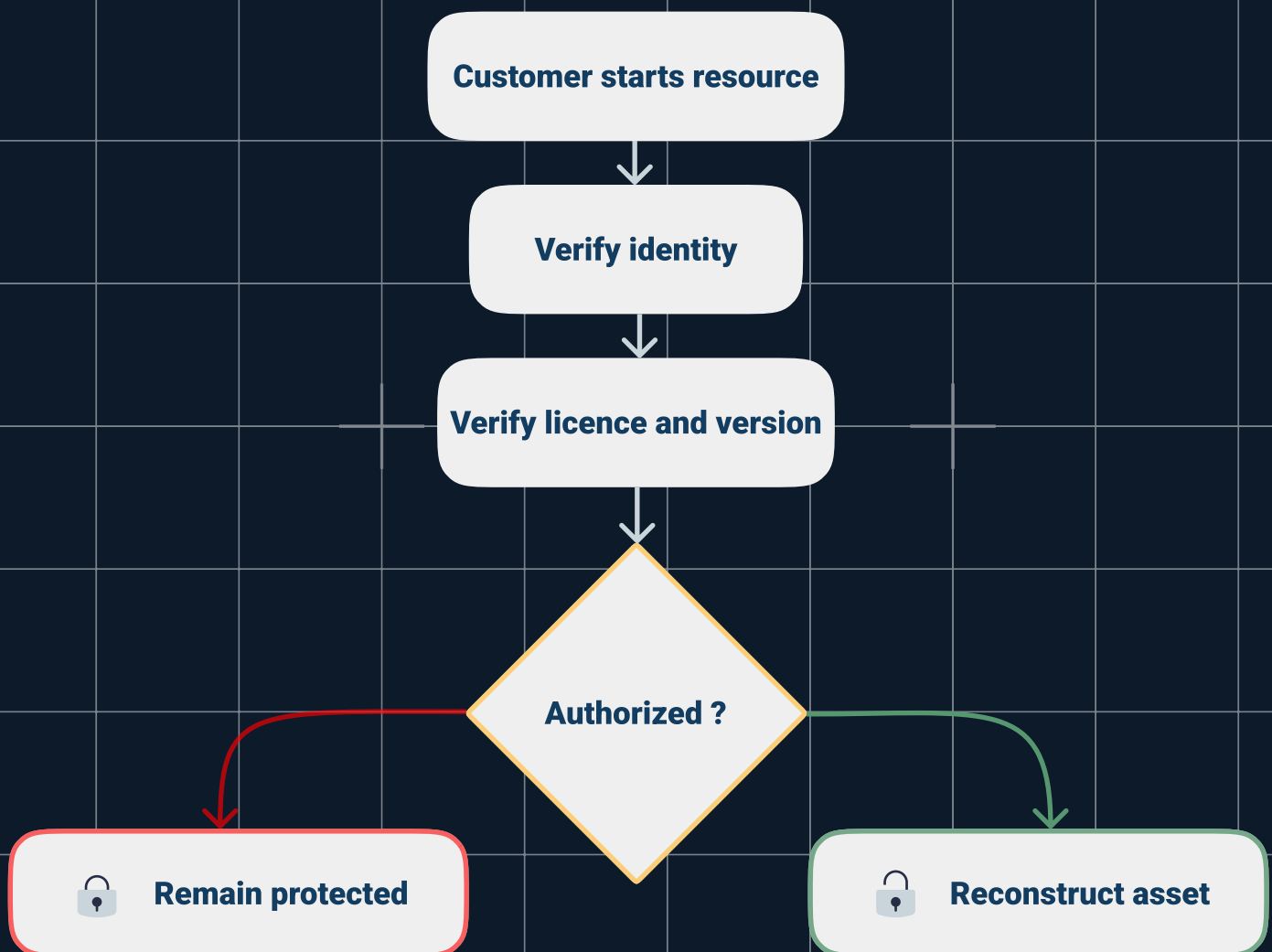


Protection continues after distribution

When the customer starts the protected resource, the runtime script verifies their Tebex identity and permitted product version through the shared Keydros infrastructure.

Only an authorized installation receives what it needs to reconstruct the protected asset at runtime.

This allows Kivo Studios to distribute its products through a familiar workflow while retaining control after delivery.



Proven under real production traffic

During a measured seven-day period, the infrastructure processed more than 739,000 requests, including over 60,000 executions of its edge-based application logic.

P90 Worker CPU time measured 31 milliseconds during the seven-day period.

At the observed traffic level, the infrastructure was operating at an equivalent rate of approximately 3.1 million requests per month.

739K+

Requests in seven days

60K+

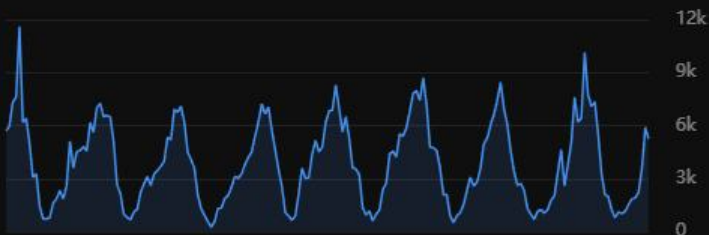
Worker invocations

31ms

P90 CPU time

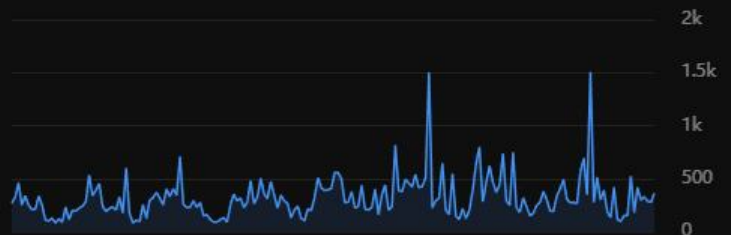
Total requests

739.74k ↘ 10.2%



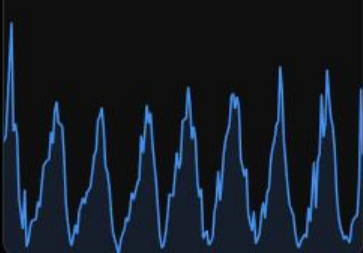
Worker invocations

60.88k ↗ 17.7%



Encrypted bandwidth

5.32 GB ↘ 9.6%



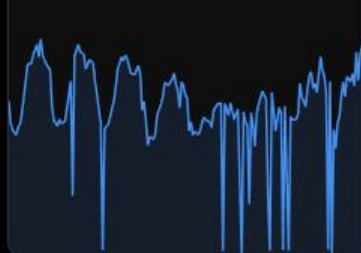
Cache hit rate

0.47% ↗ 82.7%



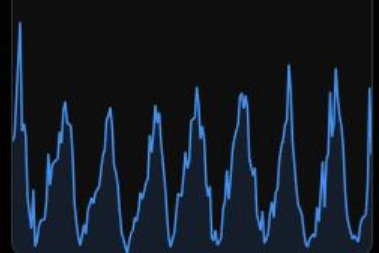
CPU time P90

31ms ↗ 45.1%



Total data transfer

5.37 GB ↘ 9.8%



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One foundation. Two protection models.

Keydros established a reusable licensing foundation for independently distributed digital products.

Blitz extended that infrastructure into an automated asset-protection workflow tailored to Kivo Studios without requiring a separate authentication system.

Together, they demonstrate our ability to design and operate security-sensitive infrastructure where availability, latency and failure recovery directly affect the customer experience.

Delivered capabilities

- Distributed licence validation
- HMAC-SHA256 request authentication
- Runtime and version verification
- Controlled offline operation
- Automated asset protection
- Edge-based production execution

We build the infrastructure that keeps digital products available, controlled and commercially viable after distribution.



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Your inventory workflow shouldn't be limited by your software.

We build custom inventory systems around the way your business actually operates from receiving and stock locations to POS, marketplace synchronization and reporting.

Tell us where your current workflow slows down.

Start with an initial inventory workflow assessment.

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