

The logo for AWS re:Invent. It features the word "AWS" in a smaller, white, sans-serif font above the word "re:Invent" in a larger, white, bold, sans-serif font. The "re:" part is positioned to the left of the "Invent" part, separated by a vertical line.

AWS | re:Invent

G P S C T 3 0 2

Building a Serverless Space Invaders Game on AWS

A serverless designing adventure

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Solutions Architect Manager
AWS Partner Network

Agenda

<https://serverless.spaceinvaders.ninja>

Let's play!

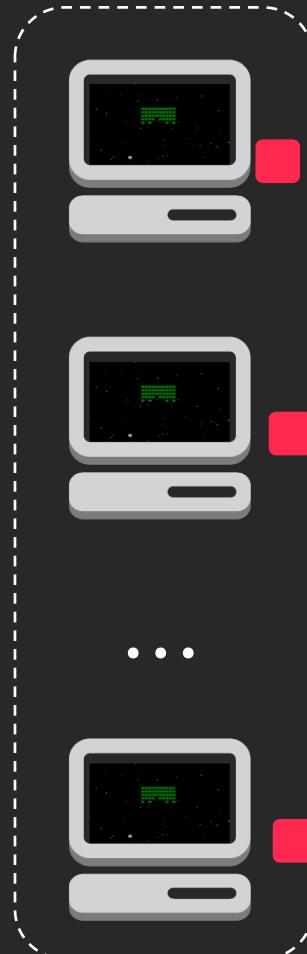
Access and play
RIGHT NOW !!

Let's chat!

You have 5 minutes to do your best!!

Space Invaders

A serverless designing adventure



Gamers



Manager

Space Invaders

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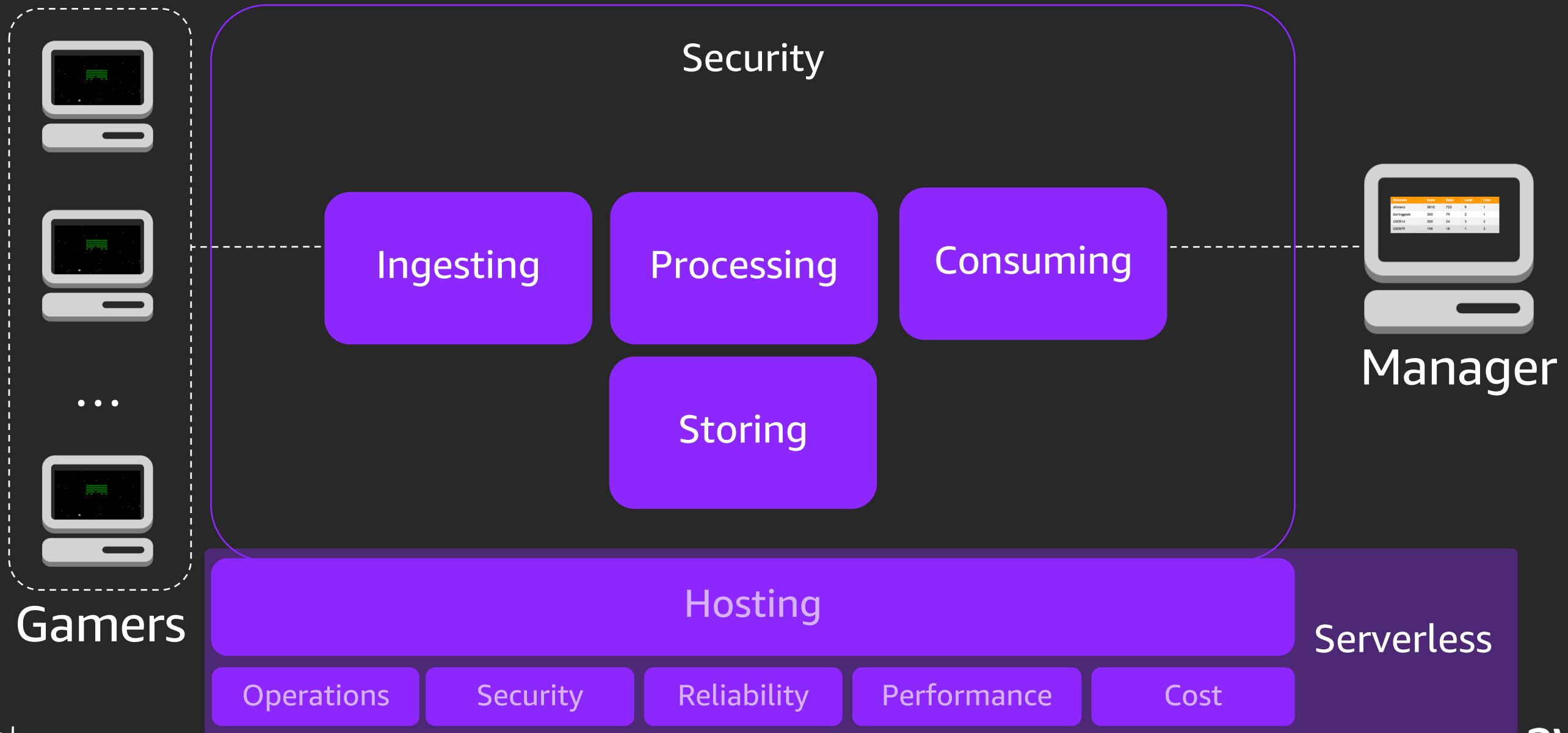
A different way of reading the requirements

I need a **web application**:

- That allows my users to register themselves, with proper access control
- While using the system, users will be producing a large amount of small chunks of data, at a rate of 1 chunk per 20 ms or so
- We need to store the data for future needs
- We need to be able to consume processed data in near real-time
- We need to minimize our costs related to infrastructure management

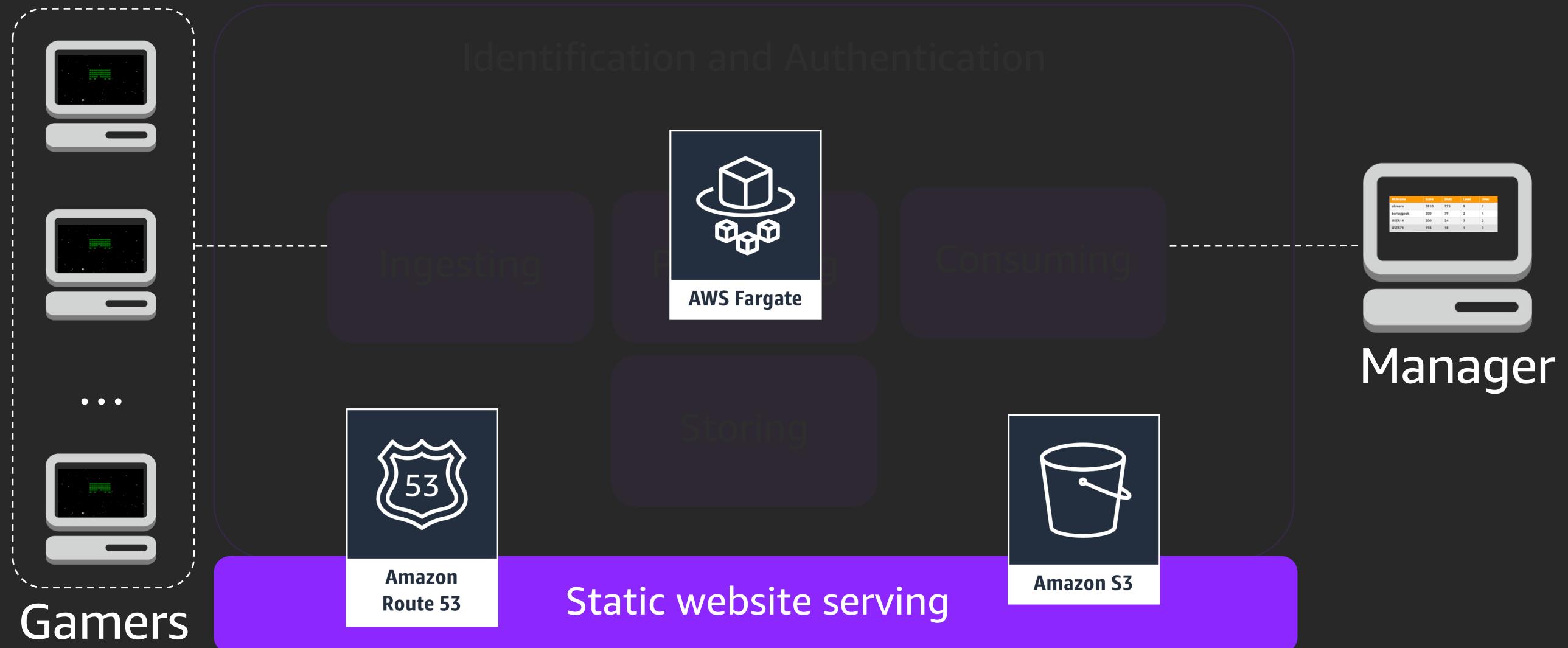
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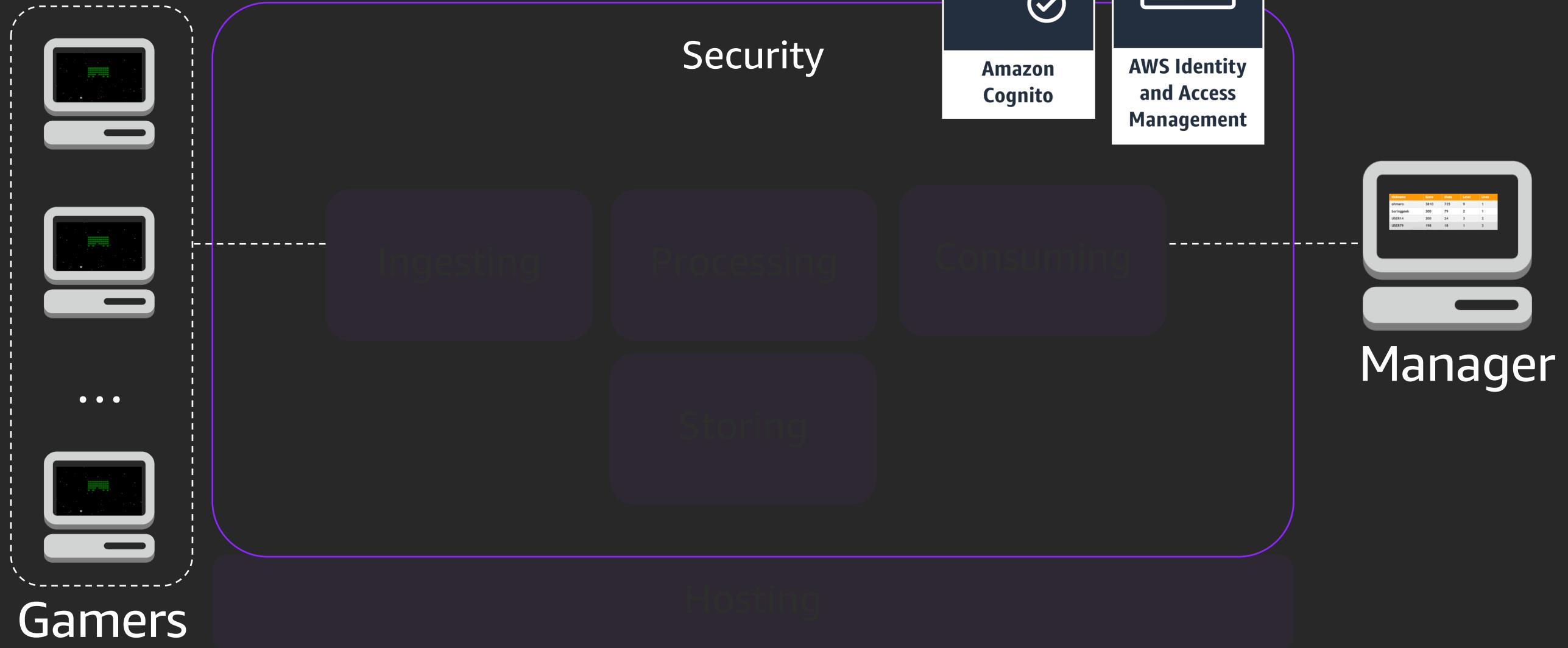
Space Invaders

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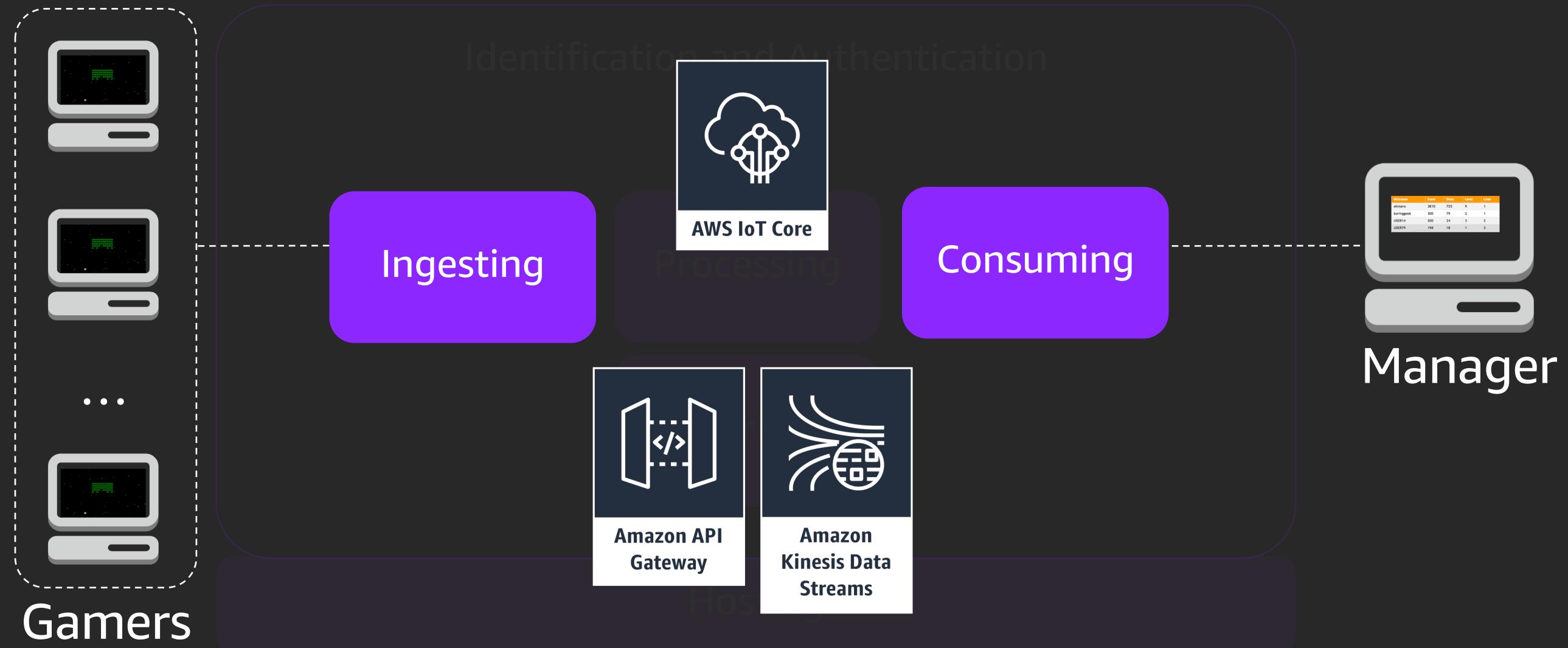
Space Invaders

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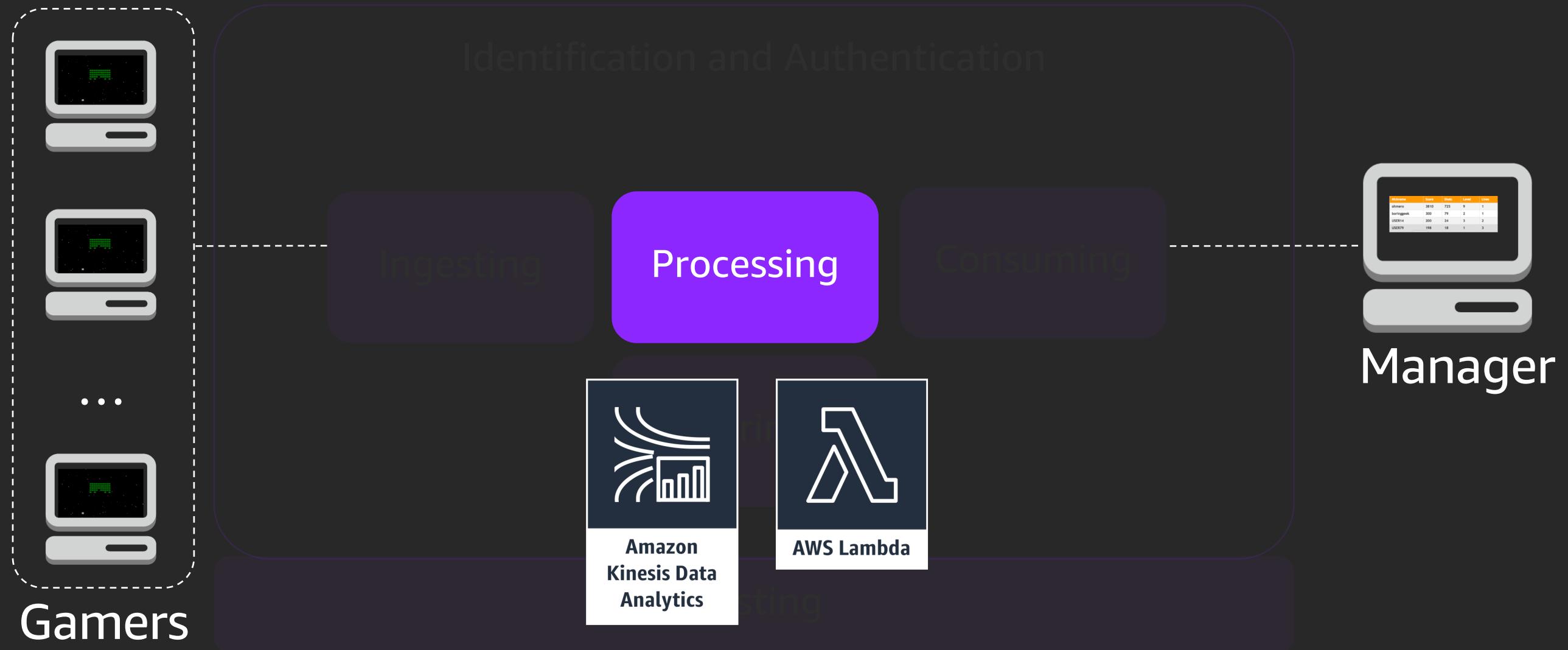
Space Invaders

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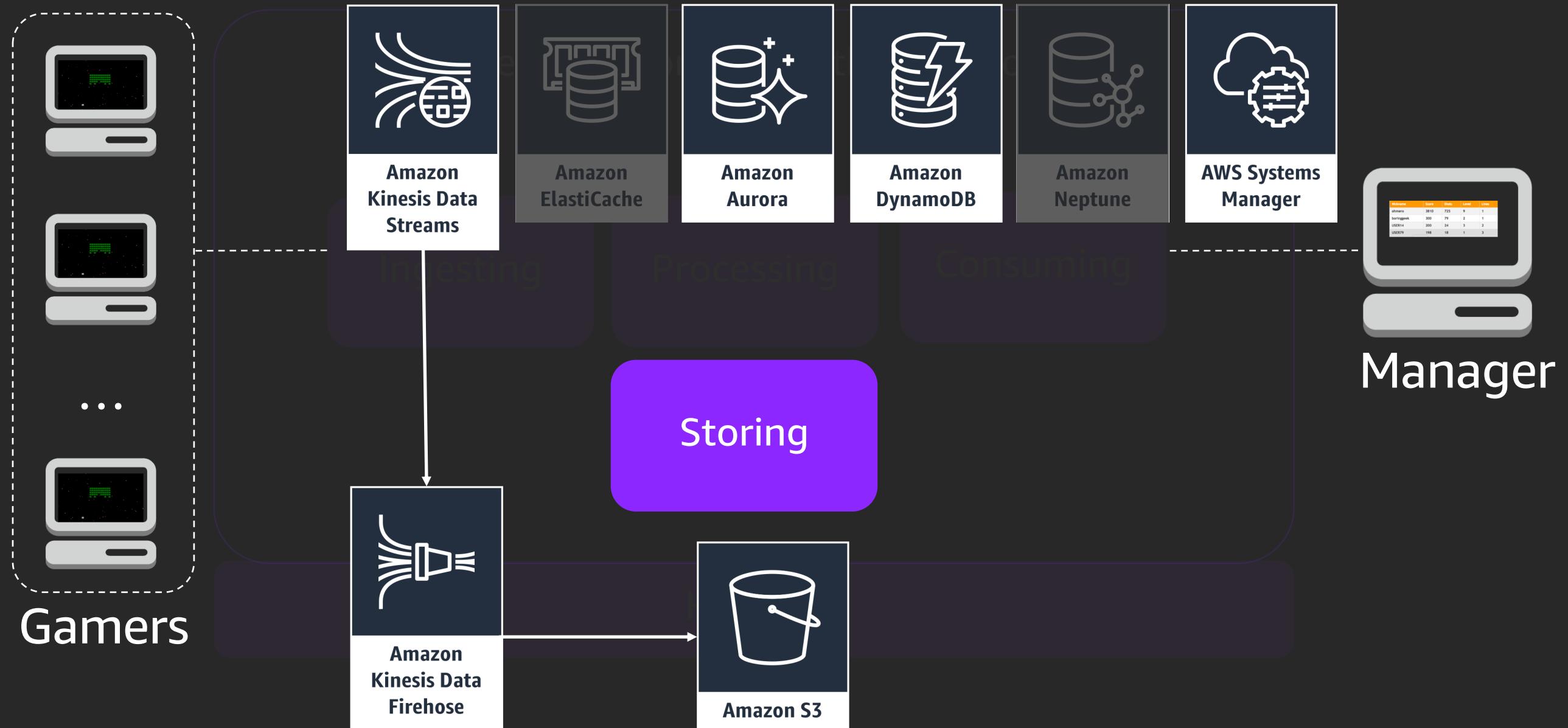
Space Invaders

A serverless designing adventure



Space Invaders

A serverless designing adventure



Space Invaders – A serverless designing adventure

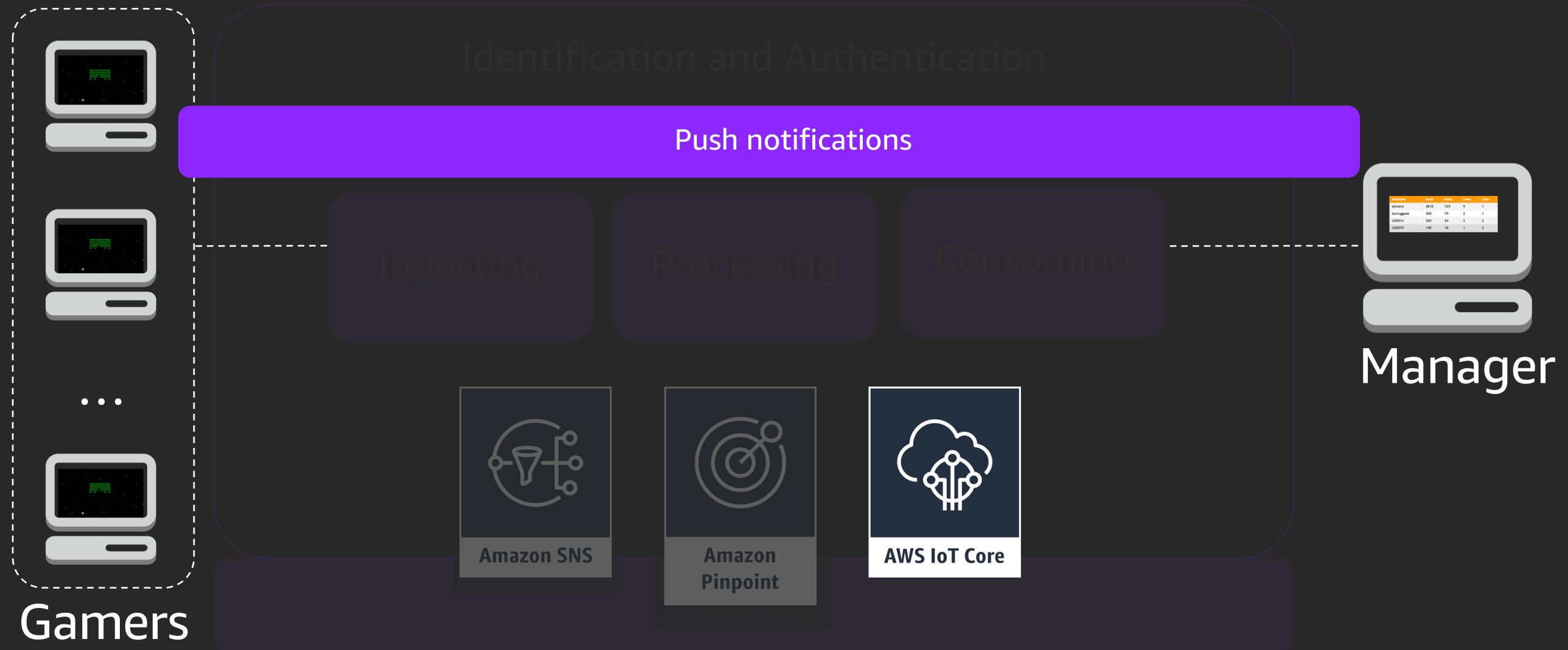
Change Request !!!

“I want all gamers starting at the same time. When the Manager pushes ‘start’, I want everybody together”

Your customer

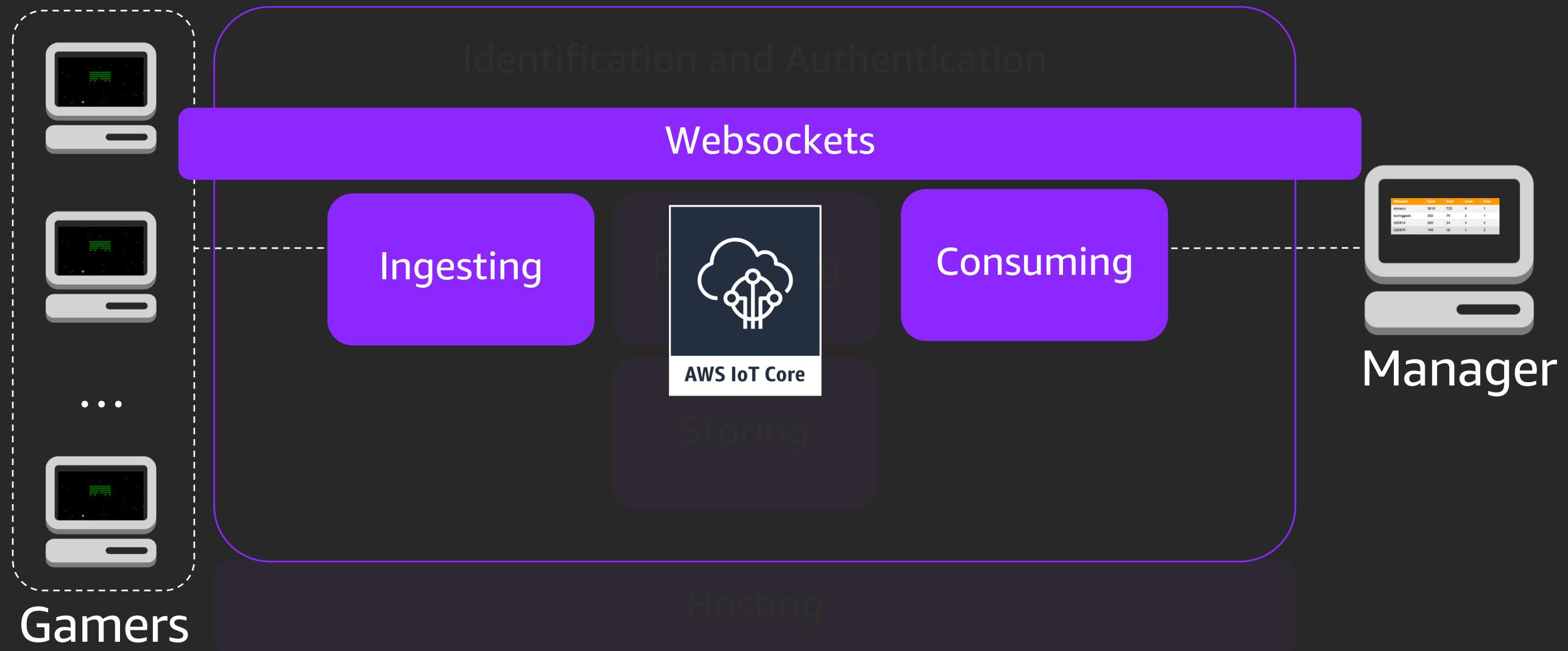
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Space Invaders

A serverless designing adventure

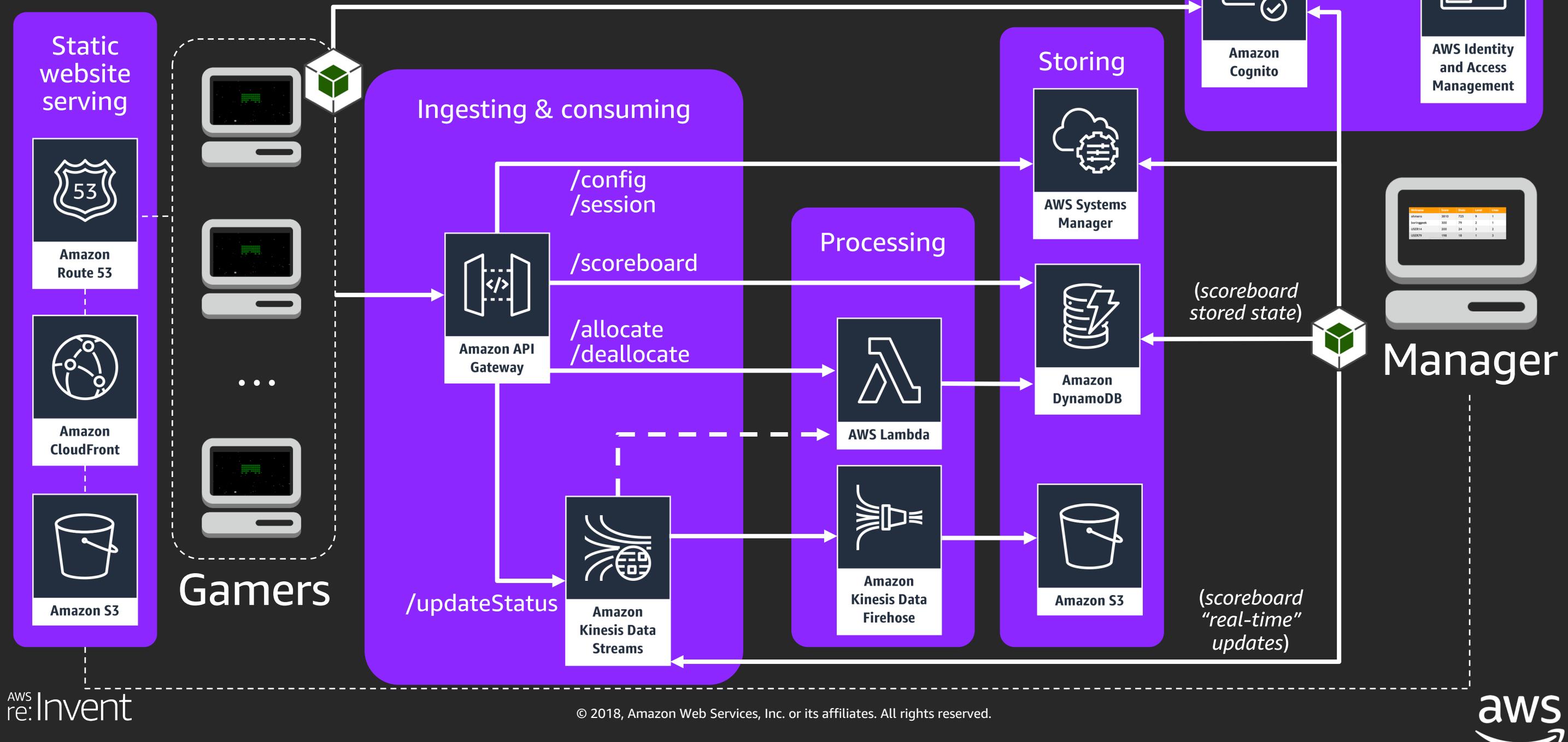


Space Invaders – A serverless designing adventure

The implemented architecture (for now)

The implemented architecture

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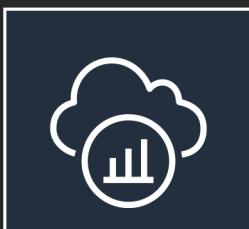


From here...

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AWS CodeStar



AWS X-Ray



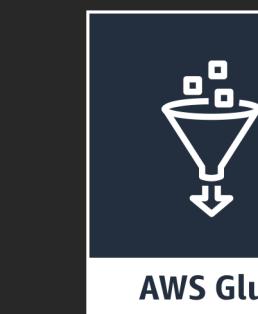
AWS Serverless Application Repository



AWS Serverless Application Model



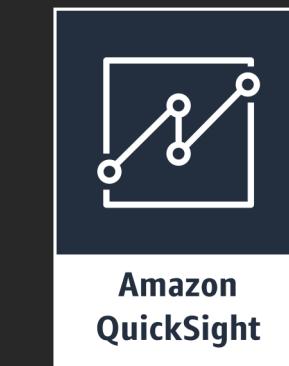
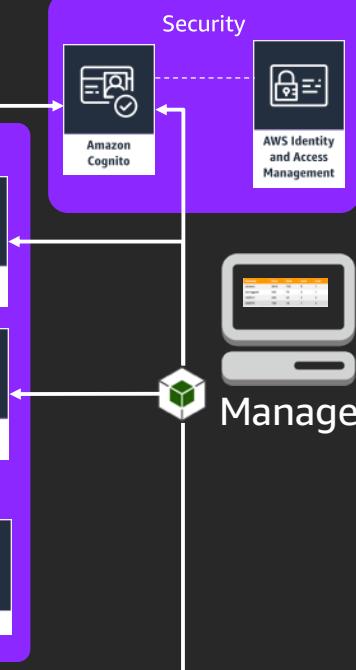
AWS IoT Core



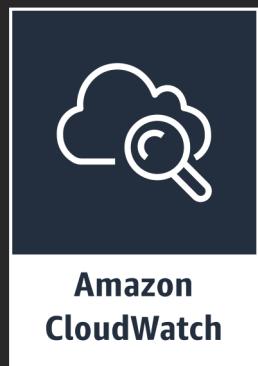
AWS Glue



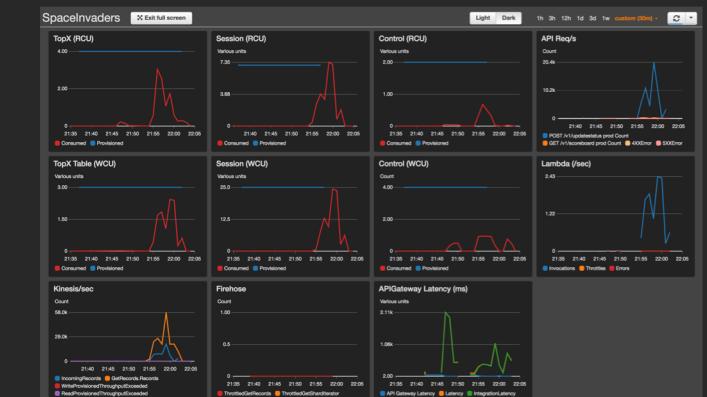
Amazon Athena



Amazon QuickSight



Amazon CloudWatch



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Related use cases

Related use cases

- Near real-time sales reporting
- Near real-time financial transactions reporting
- Near real-time event processing for mobile apps
- Gamification scenarios (where a scoreboard can be handy?)
- Near real-time event processing for sensor networks
- Near real-time event reporting from beacons in intelligent retail stores

And, a question:

Can this architecture be used to implement a system for the stock market (buy/sell)? Can it be totally serverless? Or will it need a mix?

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Serverless architectures enabling partners

Consulting partners



47 Lining

8K Miles



CONTINO



mobiQuity™

nextLINK



NorthBay



slalom



softserve

solstice

>STARTSMART

stelligent™



tecRACER



TriNimbus
Cloud Management Solutions



Thank you!

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widha@amazon.com



Please complete
the session
survey in the
mobile app.