Real-time crowd intelligence solution from WaitTime on HPE ProLiant Gen11 Server with AMD EPYC processors

WaitTime for HPE ProLiant Gen11 Servers powered by 4th Gen AMD EPYC processors deliver optimal performance, security, and economics by helping minimize wait times and improving guest experience.





Real-time crowd intelligence

Computer vision technologies can analyze new or existing video camera streams across industries in consumer edge environments, such as retail stores, public transportation hubs, and event locations that require analyzing customer interactions.

Retailers use computer vision applications to anonymously capture the flow of customer traffic at their local properties both inside the store and in the parking area. These applications are configured for a real-time operational response, such as alerting cashiers to open new check-out lines to alleviate long wait times or customer service representatives when customers are queuing for assistance at distinct locations within the store. Analyzing queue densities and how customers flow within the store can help position in-store product campaigns and validate the effectiveness of programs across store locations.

Transportation hubs face increasingly stringent safety and security requirements to help ensure the well-being of their customers. Some of their growing uses for real-time interaction monitoring include tracking compliance with the capacity limitations of specific venues and/or monitoring how traffic flows change in possible relation to a security incident.

Event locations represent significant infrastructure investments. Failure to optimize venue designs and operations to help maximize throughput in a publicly accessible environment can negatively impact usability and/or profitability. Computer vision models allow organizations to analyze customer traffic patterns within and across locations and inform design criteria for optimization, growth, and new infrastructure, thereby helping organizations continually improve overall efficiency.

What are the benefits of real-time crowd intelligence?

Real-time crowd intelligence enhances both the customer and operator experience. Patrons benefit from real-time insights by making informed decisions and choosing shorter queues. This improves customer satisfaction and reduces frustration associated with long wait times at busy vendors. Customers feel more engaged and empowered, which can increase loyalty and repeat business.

Business operators benefit from real-time customer flow data by more effectively managing queues and allocating resources. Crowd intelligence allows them to identify bottlenecks, optimize staffing, and improve overall operational efficiency. Businesses can also leverage historical data to drive informed decisions and strategic initiatives that can unlock profit-enhancing updates to their business models.



Who is WaitTime?

WaitTime is a crowd diagnostic platform that uses both real-time data and artificial intelligence to enhance customer experiences across various industries, such as sports and entertainment venues, airports, and more. WaitTime uses algorithms that leverage the Real Time Streaming Protocol (RTSP) stream from cameras mounted above locations where crowds form to deliver accurate metrics of how many people are occupying space at any given time. The WaitTime Operations Dashboard collects these analytics so that operators can quickly see how many people are in a space or where queues are forming. This data can also be shared in real-time with venue guests on digital wayfinding displays or via mobile devices to help them make smart choices about navigating the space.

HPE ProLiant: Compute engineered for your hybrid world

HPE ProLiant completes your hybrid environment wherever it lives—combining a cloud operating experience and built-in security while driving next-gen performance with the engineering leadership to power insights, innovation, and competitive advantage to drive your business forward.

Expect more from your infrastructure

Future-proof your business with HPE ProLiant Compute that delivers the efficiency, scalability, and economics to accelerate business outcomes while lowering TCO. Consolidate more workloads and increase ROI with the breakthrough performance of next-gen compute.

An open approach to your most demanding workloads

Grow your business at scale with an open approach to industry standards for innovation of advanced technology in the data center and at the edge, and flexible management of cloud-native workloads.

Your choice of compute matters

A new approach is needed to thrive in the cloud-native and data-first modernization era. First, you need a platform that can easily deploy and manage container clusters from edge to cloud with frictionless data access and the right security measures to protect your organization. This is the foundation for successfully modernizing your cloud-native environment, which can ease the process of improving legacy applications, avoiding siloed infrastructure, and preventing vendor lock-in. Realizing that value and addressing the challenges, you need compute that powers the underlying infrastructure to deploy your cloud-native applications and workloads. And the right choice of compute—one that delivers a cloud operating experience built from the ground up with a fundamental foundation security approach—can set you apart from the competition.

Top reasons to choose WaitTime's crowd intelligence solution powered by HPE and AMD

- 1. **Real-time crowd management** allows venue operations to solve safety, guest service, and concession issues based on measurable, quantifiable conditions on the fly.
- 2. **Enhanced crowd flow and guest experience** by providing guests with crowd-intelligent wayfinding displays.
- 3. Improved ROI with post-event analytics provides opportunities for optimizing crowd capacity.
- 4. **World record performance** for end-to-end machine learning and data science platform workload on HPE ProLiant DL325 Gen11 Server powered by AMD EPYC™ processor.¹
- 5. **Trusted security by design**—Protect your infrastructure, workloads, and data from threats to hardware, and risks from third-party software, with a trusted edge-to-cloud security posture built on an HPE compute core hardened through a proven, zero trust approach to security.
- 6. **Future-ready your business** with next-gen compute performance featuring up to 2x more I/O bandwidth, 50% more cores, and faster DDR5 memory.²
- 7. **Intuitive cloud operating experience** to simplify the way you control compute from edge to cloud with a seamless compute lifecycle management from HPE GreenLake for Compute Ops Management.
- 8. **Get the only x86 CPU** with an integrated, embedded security processor that is **hardened at the core** within AMD EPYC processors to help secure business data.³

¹ amd.com/en/processors/epyc-world-records

² Comparison of bandwidth of PCIe Gen 5 vs. PCIe Gen 4. Comparison of AMD 4th Gen EPYC Processor with 96 cores to AMD EPYC 7702 Processor with 64 cores.

³ amd.com/en/campaigns/epyc-9004-architecture

HPE GreenLake for Compute Ops Management

Try it for 90 days, free of cost, and enable IT to easily monitor, manage, and update servers remotely through a cloud-based console—anywhere, anytime.

Start your trial today



An HPE ProLiant DL325 Gen11 Server supports up to 28 camera streams in 1080P at 24 FPS (frames per second) using WaitTime. Seamlessly integrate your existing surveillance cameras with WaitTime powered by HPE ProLiant to unlock customer insights today.



Recommended server

HPE ProLiant DL325 Gen11 Server

The HPE ProLiant DL325 Gen11 Server is a cost-optimized 1U 1P solution that delivers exceptional value balancing compute, memory, and network bandwidth.



	Buy now
СРИ	1x 4th Generation AMD EPYC processor with up to 96 cores
Memory	Up to 3 TB / 12 DIMM slots
Storage	Up to 4 LFF HDD/SSD; SAS/SATA Up to 10 SFF HDD/SSD; SAS/SATA/NVMe Up to 20 EDSFF 3.S 1T*; NVMe

HPE ProLiant DL325 Gen11 Server

Boot options	Up to 1x hot-pluggable raided M.2 NVMe** or 1x internal SATA/NVMe M.2 (Note: Will not take up a PCle slot)
Storage controller	Gen11 controllers (PCIe and OROC)
GPU support	Up to 2 SW or 2 DW*
I/O	Up to 2 x16 PCle Gen 5 slots Up to 2 x8 OCP3.0 slots (upgradable to x16)

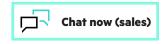
^{*} GPU Mod-X support available Q3 2023, subject to change

Next steps

See how HPE ProLiant Gen11 Server with AMD EPYC processors can accelerate your time to value with crowd-sourced intelligence from WaitTime.

Learn more at

HPE.com/ProLiant/solutions
HPE.com/ProLiant





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 $[\]ensuremath{^{**}}$ With the option to restrict the slot to internal access for security