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Gryf: A New Era in Sports Analytics at the Edge

SOLUTION BRIEF

Co-designed by GigalO and SourceCode, Gryf[™] ushers in a new era of instant data analysis at the edge via a portable data center. Gryf offers unparalleled portability, scalability, and computational power, making it an ideal solution for the dynamic and data-intensive field of sports analytics.

Sports Analytics Challenges at the Edge

- Cumbersome on-site infrastructure
- Inaccurate, incomplete, and irrelevant data collection
- Remote processing delays
 realtime decision making

The Benefits of Using Gryf

- · Portability and ease of deployment
- Real-time, server-class GPU processing and analysis
- Scalability and flexibility
- Deeper performance monitoring
- Enhanced competitiveness
- · Better outcomes on the field



Powered by GigalO's AI fabric, Gryf unifies edge-to-core infrastructure, which translates into instant data analysis at the edge. Gryf is the most significant advancement in sports performance monitoring and analytics in years, a suitcase-sized AI supercomputer that provides high-performance computing capabilities in a portable form factor to provide teams and athletes with real-time, on-site data processing and analysis. Key features:

Portability

Gryf is airline cabin-friendly and can be easily transported to event and practice venues via an overhead bin, making it ideal for field deployment.

High Performance

Equipped with server-class GPUs and CPUs, Gryf can process large datasets and perform complex AI tasks on site.

Scalability

Gryf's AI fabric can interconnect up to five units, providing significant advantages in terms of speed, real-time capabilities, data integration, cost efficiency, enhanced machine learning, and system robustness.

Configurability

Gryf supports a mix of compute, accelerator, storage, and network sleds, allowing for tailored hardware configurations to meet specific workload requirements.

A Powerful Tool for Sports Analytics

Gryf addresses several critical challenges in sports analytics, including data quality, real-time processing, cost, and collaboration. By making true highperformance computing portable, Gryf enables sports organizations to leverage advanced analytics right on the field for performance optimization, injury prevention, and strategic decision-making. Teams can stay competitive and achieve better outcomes with instant access to advanced data analytics.

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Empower coaches and performance staff to make data-driven decisions that enhance training, reduce injury risks, and optimize overall athlete and team performance during games by bringing advanced sports analytics technology to the field.

Utilize Wearable Sensor Data Instantaneously

Cutting-edge wearable tracking devices can monitor athletic performance using GPS, Local Positioning System (LPS), and inertial sensors (accelerometers, gyroscopes, magnetometers) that track athlete movements, speed, workload, and heart rate. With Gryf, the data collected can be instantaneously analyzed right on the field to provide realtime insights into individual and team performance, injury risk, and training optimization. Performance data can be integrated directly with local, Gryf-processed video analysis to provide a comprehensive view of team or athlete performance, helping coaches make more informed decisions.

Make Faster Decisions With a Deeper Understanding of the Data

Gryf's portable design delivers high-performance computing capabilities that can be deployed anywhere, making it ideal for field missions and remote training locations. Built to withstand the rigors of field use, Gryf delivers reliable performance in diverse environments.





Stack Your Gryfs

This diagram shows how you can stack up to five Gryfs, interconnected across GigalO's AI fabric. This configuration allows any server to access any other server or resource device within the fabric. Gryfs can be reconfigured in real time to meet application requirements.



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Get Data Center Performance in a Configurable, Field-Ready, Rugged Design

Gryf can process the vast amounts of sensor data collected in real time because all data is processed on site, without any of the latency that comes with sending data to a remote data center. Gryf's composable infrastructure allows for dynamic reconfiguration on the fly to meet changing field requirements, which ensures optimal resource utilization and provides the ability to scale via multiple interconnected Gryf units. This scalability allows Gryf to handle extremely large datasets and complex analytics tasks, making it suitable for a wide range of sports and team sizes.

How Gryf Delivers Real-time Onsite Insights

The diagram below shows the ruggedized Gryf, which can be deployed at the edge (left), and a SuperNODE[™], located back in the core data center (right). The unique value of GigalO's AI fabric is its ability to combine these into one seamless and dynamic environment. No longer do you need to copy data over when returning to the data center, simply plug Gryf into a SuperNODE and the data is instantly ready to be analyzed.





WHAT'S YOUR EDGE?

Learn more at gigaio.com/products/gryf