Press Release

Next Level Intelligent Automation: Otto Group Enhances Robotic Coordination with NVIDIA AI

Otto Group collaborates with NVIDIA and Reply to deploy a central AI-driven virtual control system for large-scale rollout, enabling intelligent robotic orchestration for faster deliveries and better service

Hamburg, Germany / New York, USA – January 9, 2026. The Otto Group today announced a collaboration with NVIDIA, the world leader in accelerated computing, to improve supply chain operations through intelligent robotics. This initiative will scale the network-wide deployment of a "Robotic Coordination Layer", powered by NVIDIA Omniverse libraries, and Isaac Sim, across a multitude of Otto Group's 120 logistics locations. It represents a comprehensive approach to train robots in a simulation environment for intelligent robotic automation, setting a new industry benchmark for improved efficiency of logistics operations, scalability and integration, positioning Otto Group as a first European mover in retail. The "Robotic Coordination Layer" is crucial for seamlessly integrating and coordinating diverse robotic systems with existing and new partners. This initiative follows significant recent investments in logistics and robotics, underscoring the Otto Group's commitment to leveraging cutting-edge technology to enhance operations and shape the future of logistics. The Hermes Fulfilment logistics center in Loehne, Germany, will serve as the first full-scale operational site and blueprint for further roll-outs, with IT services specialist Reply having created the digital twin. Following this, Otto Group One.O will develop the layer's core, including its integration interfaces, and will assume governance of the solution.

Central to this strategic collaboration is the "Robotic Coordination Layer" – an intelligent virtual navigation and communication system designed for all robots in the Otto Group's logistics centers. NVIDIA AI infrastructure, together with NVIDIA Omniverse libraries and NVIDIA Isaac for AI Robotics, provides the foundational infrastructure for digitizing and optimizing supply chain operations. This powerful software is available as a single, ready-to-run solution from the Google Cloud Marketplace, all powered by Google's high-performance infrastructure. By creating physics-based digital twins of Otto Group's existing distribution and fulfillment centers, the Otto Group can simulate, train and deploy different kinds of robots including autonomous mobile and stationary robots significantly faster. This ensures seamless collaboration among robots across the supply chain, aiming to enhance customer experience, optimize peak management, and boost overall efficiency.

"*More than three years ago we embarked on a journey to deploy AI and robotics in the field of logistics. Our experiences to date have shown the huge potential for improving efficiency and service*," says Kay Schiebur, Member of the Executive Board, Services, Otto Group. "*With NVIDIA and Reply, we are now ready to take intelligent automation to the next level. This partnership will provide the fundamental structure – a truly innovative way for our robots to communicate – allowing us to quickly scale up robotic solutions in our complex operations, strengthening our leadership in responsible business, especially here in Europe. We are always striving to improve our performance and ensure our future viability.*"

"*Physical AI is redefining what's possible in supply chain, transforming warehouses from static facilities into dynamic, responsive systems that can adapt in real-time*," says Azita Martin, Vice President and General Manager Retail & Consumer Products and Goods at NVIDIA. "*Leveraging NVIDIA RTX Pro 6000 and NVIDIA Omniverse on GCP, together with Isaac Sim, Otto Group is training a fleet of robots using physics-based simulation, creating a scalable blueprint for the future of logistics, where fleets of robots and intelligent systems collaborate seamlessly to boost efficiency and drive agility.*"

Virtual real-time coordination of all robots powered by NVIDIA Omniverse, Isaac Sim and RTX Pro 6000 GPUS on GCP

The "Robotic Coordination Layer" connects robot fleets in the real warehouse to a digital twin – an exact virtual representation of the logistics centers. This digital twin displays the real-time locations and movements of all robots, enabling seamless, interactive control and management of operations. Developed by Reply, an AI and robotic specialist and a global service delivery partner of NVIDIA, this solution uses reality-capture techniques and advanced post-processing from sensors and cameras mounted on Boston Dynamics' Spot robot as it moves through the warehouse. Once established, the digital twin enables virtual reconfiguration of warehouse areas for process optimization and dynamic simulations to support peak management. For example, different volume scenarios can be simulated to determine optimal robot and personnel requirements. Concurrently, the "Robotic Coordination Layer" integrates with robotic fleet management tools and the Warehouse Management System (WMS) to coordinate and communicate with various robotic fleets, all visualized and managed within the digital twin. This real-time system ensures smooth ramp-up, flexible configuration, and empowers users with different roles and permissions to collaboratively access, actively manage, and optimize robotic workflows. The vision is a smart, remotely operable warehouse environment that adapts quickly to changing needs.

"*Creating a digital twin is more than just mapping a space – it's about enabling intelligent orchestration at scale,*" says Kai Uwe Ernst, Executive Partner at Reply. "*By combining NVIDIA's cutting-edge technologies with our expertise in AI and robotics, we're laying the foundation for a new standard in robotic coordination. This system will allow different robotic fleets to communicate and collaborate seamlessly, unlocking new levels of efficiency and adaptability in logistics operations.*"

The initiative offers several key benefits, including:

- **Optimized Teamwork for Robots**: Different types of robots will collaborate more effectively, sharing tasks and resources for smoother operations.

- **Quickly Adding New Robot fleets**: The system will facilitate faster integration of new robotic solutions, allowing for quick adaptation to changing demands.

- **Safe Virtual Testing**: New operational methods can be tested in a virtual environment, ensuring readiness before implementation in real-world settings, thereby saving time and preventing disruptions.

- **Simple Robot Management**: Teams will have a clear, easy-to-understand overview of all robot activities, simplifying management processes.

Network-wide roll-out and the fully digitized warehouse of the future

The "Robotic Coordination Layer" is initially being implemented at Hermes Fulfilment's logistics

center in Loehne, Germany. Loehne will serve as the blueprint and first full-scale operational site for this innovative solution, with plans for the system to be subsequently rolled out network-wide. The initial development phase involves a significant investment in the double-digit million Euro range, demonstrating Otto Group's dedication to leading the way in technological advancements in retail. The long-term vision for the coordination layer is to fully digitize the entire warehouse ecosystem, a goal fundamentally enabled by the digital twin created using NVIDIA AI infrastructure. It will act as the central operating system, seamlessly connecting, managing, and operating a broad spectrum of assets – from robotic fleets and conventional automation technology like sorters, to integrated sensors for functions such as pallet size detection and gate control.

The strategic initiative with NVIDIA represents a cornerstone of the Otto Group's long-term plan to seize new opportunities through the use of cutting-edge technologies. As the largest online retailer of European origin, the company's track record demonstrates a commitment to leveraging technology to enhance global supply chain, ensuring faster and more reliable deliveries for customers while creating modern, innovative workplaces for employees.

Otto Group
With a strong heritage as a family business and firmly rooted values, the Otto Group is looking to the future with confidence. Over the past 75 years, the company has developed from a catalog-based mail order company into an international digital retail and services group with 36,300 employees and a large number of key companies, brands and holdings in over thirty countries, primarily in Germany, the rest of Europe and North America. Its business activities extend to the Platforms, Brand Concepts, Retailers, Services and Financial Services segments. In the 2024/25 financial year (ending February 28), the Otto Group generated revenues of 15 billion euros. As the largest online retailer of European origin, it is shaping the digital retail and digital services of the future by drawing on its strength, market significance and values. Driven by a passionate and entrepreneurial performance culture, the Group is exploiting its vast market expertise and technological competence to inspire its many millions of customers with high-quality products, unique choice of goods and an array of services. The Otto Group is proof that a value-oriented approach and business success can go hand in hand. Environmental protection has been another corporate objective since 1986. It takes its ecological, social and digital responsibility seriously – and will continue to do so. Find out more at www.ottogroup.com.

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The press release, along with all accompanying photos and video, is available here:
https://ottogroup.com/innovationinsights2026

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