UNIBAP

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Unibap becomes a member of Amazon Web Services (AWS) Partner Network and begins collaboration to integrate AWS cloud, storage and edge services into SpaceCloud

Unibap AB (publ) announces AWS integration with Unibap space-focused hardware and software that will enable container and serverless compute with lower latencies and less cost. This simplifies data management for satellite operators and application developers. The collaboration will allow customers to access AWS services and capabilities in the space environment for autonomous edge processing and event handling. The combination will give aerospace and satellite customers real-time access to AWS edge services and capabilities on orbit so that they can run various workloads that are dynamically allocated to virtual resources based on mission need without having to connect back to resources on Earth. Together, AWS and Unibap will help customers quickly turn raw satellite data into actionable information that can be used to autonomously command satellite constellations, reduce the volume of data downlinked to Earth, and disseminate alerts in seconds instead of having to wait minutes or even hours. Unibap, which has joined the AWS Partner Network (APN), and AWS will jointly perform the integration in phases, aiming for initial testing and validation during 2021.

The increase in commercial satellite launches is driving huge increases in space data generation, with companies collecting upwards of 100 terabytes (TB) or more of imagery, signals, synthetic aperture radar (SAR), and Internet of Things (IoT) data per day, 365 days a year, resulting in dramatic increases for data storage and processing. Traditionally, customers downlinked their data from designated satellites, had to move the data to an operations center for processing, and then had to wait up to 24 hours before the data became accessible. The lag time between data acquisition and analysis made it difficult for customers to accurately analyze the data for anomalies or changes in critical conditions in support of disaster monitoring, geospatial intelligence, and air and sea traffic management. This becomes even more challenging as space exploration moves beyond low-earth orbit.

With the collaboration between Unibap and AWS, aerospace and satellite customers will be able to more quickly and flexibly collect data and immediately analyze that information on orbit, leveraging accessibility of AWS compute, storage, and container orchestration services on their spacecraft. For example, satellite operators will be able to program their satellites to perform autonomous command and control operations, despite limited and intermittent network connectivity. This will enable them to process mission-specific workloads and automate real-time actions onboard spacecraft, such as changing the mission focus of an Earth Observation satellite from missile detection to space surveillance, or analyzing images to detect changes that drive automated satellite collection scheduling. Customers also will be able to distribute the

processing of larger workloads that could not be run with the available resources of a single satellite, such as high-value target tracking and automated orbital maintenance, across an entire satellite constellation.

Unibap's cost-efficient, radiation tolerant, and high-performance SpaceCloud computing solution helps aerospace and satellite customers ensure their workloads will be executed safely on orbit. Unibap's SpaceCloud solution iX5-100 is powering the data analytics, sensor data management and satellite communication of the NASA funded Hyperspectral thermal imager (HYTI) technology demonstrator mission due for launch in 2021 by Hawaii Spaceflight Laboratory (HSFL), University of Hawaii in Manoa.

- "The timing of our collaboration to bring full cloud experience to space is perfect and is the culmination of many years of in-house development and continuous support from the Swedish National Space Agency and the European Space Agency. I am extremely pleased to be taking the next step of cloud computing to space with AWS and foresee enablement of new business models and space mission architectures that benefits commercial and government endeavors", says Dr. Fredrik Bruhn, CEO Unibap.

- "Satellite operations customers must be confident the solutions they use for their missions provide high reliability and resiliency in the space environment. Unibap's highly performant and resilient space-qualified SpaceCloud processor and other hardware solutions combined with AWS edge software solutions will enable customers to build and operate every aspect of their mission using AWS services", said Shayn Hawthorne, AWS Aerospace & Satellite Technology Leader.

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Unibap is required to disclose this information under the EU Market Abuse Regulation. The information was submitted for publication December 15, 2020 at 08:30 CET.

About Unibap

Unibap is a high-tech company that aims to automate and streamline industries on earth as well as in space. With smart solutions based on AI and robotics, we want to increase quality and productivity for our customers while eliminating dangerous tasks that today are performed manually. Unibap strives to have a positive impact on both society and the environment. The company's Quality Management System is certified according to SS-EN ISO 9001:2015. The company is listed at Nasdaq First North Growth Market.

For more information, please visit the Company's website unibap.com.

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