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FREQUENTIS embraces Open Network Operating System – ONOS for the air traffic control network

Frequentis is the first ATC vendor to bring the software defined network (SDN) based carrier-grade ONOS, to the safety-critical market

Frequentis vitalsphere[™] NetBroker ensures the service continuity and performance required of an ATM-grade network through brown-out detection, flow-based routing, and bandwidth optimisation. NetBroker is built on top of the ONOS, which is supported by a growing number of carriers and network companies, including AT&T, Cisco, Nokia, Huawei, Google and Fujitsu, providing proven interoperability with almost any network device or vendor.

Consistent and reliable network performance, without service interruption is essential for safety-critical environments like air traffic management. Through the use of real-time network performance information and a set of application specific performance targets NetBroker has the ability to switch between networks when performance is reduced.

"ONOS is being used around the globe in many ways by service providers, enterprises, research institutions and other organisations. We're extremely excited to see the ONOS framework now in use for safety-critical deployments, thanks to Frequentis who built a dedicated ATM product on the ONOS platform. It is now operational in the largest country in South America and ensures safe air travel in the region." Says Guru Parulkar, Executive Director of the Open Networking Foundation (ONF).

NetBroker fills the technical gap between conventional SDN solutions and Air Traffic specific needs, ensuring ATM-grade performance reliability and safety. By continuously measuring network performance, NetBroker from Frequentis can detect any degradation in network quality and compare other network conditions in the same segments, proactively rerouting network traffic – selectively for each application.

"Conventional networks only react to total link loss, known as black-outs, while NetBroker can detect degradation in performance known as brown-outs. Dynamic rerouting based on application priorities and bandwidth availability enables automatic rerouting, eliminating loss of service or reduced image quality, essential in safety critical situations," says Stefan Galler, Director ATM Networks, Frequentis



By perceiving likely problems with bandwidth, based on network conditions and the application requirements, the system is able to selectively re-route high-demand application traffic ensuring continuous voice and data transfer without loss of service.

About FREQUENTIS

Frequentis is an international supplier of communication and information systems for control centres with safety-critical tasks. These control centre solutions are developed and distributed by Frequentis in the business segments Air Traffic Management (civil and military air traffic control, and air defence) and Public Safety & Transport (police, fire and rescue services, emergency medical services, vessel traffic and railways). Frequentis maintains a worldwide network of subsidiaries and local representatives in more than fifty countries. The company's products and solutions are behind more than 25,000 operator positions in almost 140 countries. With this extensive portfolio, Frequentis is the leading provider of voice communication systems... all making our world a safer place every day!

For more information, please visit www.frequentis.com

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