A lightweight software stack and synergetic metaorchestration framework for the next generation compute continuum

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Nephele Project
nephele-project.eu

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NEPHELE’s vision is to enable the efficient, reliable and secure end-to-end orchestration of distributed applications over programmable infrastructure that is spanning across the compute continuum from Cloud-to-Edge-to-IoT, removing existing openness and interoperability barriers.

The NEPHELE project aims to introduce two core innovations, namely:

- **A synergetic meta-orchestration framework** for managing distributed applications in the compute continuum based on the adoption of a “system of systems” approach.
- **An IoT and edge computing software stack (VOStack)** for leveraging virtualization of IoT devices at the edge and supporting openness and interoperability aspects in a device-independent way.

The NEPHELE outcomes are going to be demonstrated in use cases across various vertical industries, including areas such as disaster management, logistic operations in ports, energy management in smart buildings and remote healthcare services. Two successive open calls are planned.