



HEAPPE MANUAL & TRAINING Best Practice Guide

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Best Practice Guide

HPC-as-a-Service is a well-known term in the area of high-performance computing. It enables users to access an HPC infrastructure without a need to buy and manage their own physical servers or data centre infrastructure. Through this service small and medium enterprises (SMEs) can take advantage of the technology without an upfront investment in the hardware. This approach further lowers the entry barrier for users and SMEs who are interested in utilizing massive parallel computers but often do not have the necessary level of expertise in this area.

To provide this simple and intuitive access to the supercomputing infrastructure an in-house application framework called HEAppE has been developed by IT4Innovations. It manages and provides information about submitted and running jobs and their data between the client application and the HPC infrastructure. It is licensed as an open source so any interested party is able to download it and using the official documentation to test it on user's local computer.

<https://heappe.it4i.cz/docs/index.html>

HEAppE middleware's solution is applicable for a number of domains or use-cases whenever there is a need for a secure, remote, and easy-to-use access to a remote HPC infrastructure. The middleware's architecture is designed with ideas of interoperability, security, and adaptability thus this solution is also viable for a different computing infrastructures.

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