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HPE employees take the lead in providing servers to help break down Coronavirus protein structure

HPE servers provide BOINC with the computing power it needs for its research into the structure of the proteins from which the coronavirus originates. Exposure of this combination of proteins is crucial for the research and development of drugs and vaccines against COVID-19.

“One of the 30 studies supported by BOINC is called Rosetta@Home, an open-source protein binding study to reveal the combination of proteins from which COVID-19 is derived,” explain David and Arnout. “The discovery of this combination would be a step forward in the research and development of coronavirus drugs and vaccines.”

The compute power that HPE servers provide to Rosetta@Home is used to help reveal the structure of COVID-19 proteins. The servers design and compute millions of combinations of so-called amino acid chains. They do this based on the masses of data downloaded by researchers. One of these chains forms the protein structure from which the coronavirus is derived. In addition, the study also aims to develop mini-proteins that can be used as the basis for a drug or vaccine against COVID-19.

HPE donated 100 units combined of HPE ProLiant servers, C-class blade and HPE Synergy, a composable infrastructure offering. Together, they represent 3,882 so-called central processing units and a processing power of 10 Teraflops, equivalent to the power of approximately 500 laptops. These combined strengths can be further increased because HPE Belgium employees can also use their own computers.

“COVID-19 can only be overcome through lasting and intelligent cooperation. Our employees understood this when they provided BOINC with the additional server capacity needed to search for the vaccine that the world is eagerly awaiting. I am extremely proud of this initiative and we hope to make a difference,” says Stéphane Lahaye, Managing Director Belux HPE. “HPE Belgium now ranks third on the list of average contributions to BOINC, which takes into account the number of servers, IT jobs and data of the organizations. A remarkable achievement to say the least”.

You can find the details of the HPE Belgium contribution [here](#).