Abstract

HEP is only one of many sciences with sharply increasing compute requirements that cannot be met by profiting from Moore's law alone. Commercial clouds potentially allow for realising larger economies of scale. While some small-scale experience requiring dedicated effort has been collected, public cloud resources have not been integrated yet with the standard workflows of science organisations in their private data centres; in addition, European science has not ramped up to significant scale yet. The HELIX NEBULA Science Cloud project, partly funded by the European Commission, addresses these points. Ten organisations under CERN's leadership, covering particle physics, bioinformatics, photon science and other sciences, have joined to procure public cloud resources as well as dedicated development efforts towards this integration. The contribution will give an overview of the project, explain the findings so far, and provide an outlook into the future.